

Introduction to data processing and image recognition using Python and TensorFlow

Workshop activity sessions 13, 14, and 15 April/May 2021

Duration: 2 hours 15 minutes (3 x 45 minutes)

Activity sessions overview

The aim of this session is to further investigate TensorFlow with Python in order to implement an approach for the kNN algorithm.

Part 1: Session 13

Access the provided Python script `kNN_TensorFlow_1.py`. Run this script and understand its operation. Note the information that is printed to the standard output, the format of the printed information, and the meaning of the different parts.

Part 2: Session 14

Modify the input dataset to vary the size and data value distribution for each of the two input sets and the value for k .

Part 3: Session 15

Continue with the activities in part 2.

Part 4: Session review

Ensure that all Python code developed is suitably formatted and commented. Where appropriate, follow the Python [PEP 8 -- Style Guide for Python Code](https://www.python.org/dev/peps/pep-0008/) (<https://www.python.org/dev/peps/pep-0008/>).